



After a decade of downsizing and reengineering most manufacturing companies are still searching for the formula to sustain business growth...

### Visual Performance Measurements

Useful, accurate, current and visible production measurements are the scores required to empower your 5s, Six Sigma and lean teams to continuously improve your company's performance.

It is unlikely that tomorrow's customer will become less demanding. Today's suppliers must focus on satisfying their customers in an even more competitive marketplace. Satisfying the customer while making a profit requires extraordinary acts of flexibility, impeccable quality and asset efficiency.

Many companies are aggressively pursuing productivity programs; 5s, Six Sigma, Lean...to meet these requirements and are finding success in their ability to both satisfy the customer and profitably grow their businesses.



AlphaVision PC display

Companies that have fully embraced productivity improvement programs, such as lean, have reported dramatic improvements such as;

- > 40% - 50% Reduction in cycle time
- > 25% - 35% Reduction in set up time
- > 35% - 45% Reduction in down time
- > 30% - 40% Improvement in productivity

### AlphaVision PC Series – Tri-color

Model Number	Pixel Array	Display Area	Physical Size*	Weight
AVPC192032T3	192W x 32H	57.6" x 9.5"	69" x 16.7"	210 lbs.
AVPC192048T3	192W x 48H	57.6" x 13.8"	77" x 33.5"	325 lbs.
AVPC192064T3	192W x 64H	57.6" x 19"	77" x 33.5"	350 lbs.
AVPC192080T3	192W x 80H	57.6" x 23.8"	77" x 43"	425 lbs.
AVPC192096T3	192W x 96H	57.6" x 28.5"	77" x 43"	450 lbs.
AVPC256032T3	256W x 32H	76.8" x 9.5"	88" x 16.7"	280 lbs.
AVPC256048T3	256W x 48H	76.8" x 14.3"	96" x 33.5"	375 lbs.
AVPC256064T3	256W x 64H	76.8" x 19"	96" x 33.5"	400 lbs.
AVPC256096T3	256W x 96H	76.8" x 28.5"	96" x 48"	570 lbs.
AVPC256112T3	256W x 112H	76.8" x 33.3"	96" x 48"	600 lbs.
AVPC320032T3	320W x 32H	96" x 9.5"	107" x 16.7"	350 lbs.
AVPC320064T3	320W x 64H	96" x 19"	115" x 33.5"	500 lbs.
AVPC320096T3	320W x 96H	96" x 28.5"	115" x 43"	650 lbs.
AVPC320112T3	320W x 112H	96" x 33.3"	115" x 52.6"	800 lbs.
AVPC320128T3	320W x 128H	96" x 38"	115" x 52.6"	850 lbs.

\*Width without optional speaker. Optional speaker adds 12"

### AlphaVision Infinity Digital Video Series – Full Color

Model Number	Pixel Array	Display Area	Physical Size	Weight
INF-128072	128W x 72H	50.4" x 28.3"	74.4" x 48.3"	229.1 lbs.
INF-256120	256W x 120H	100.8" x 47.2"	124.8" x 67.2"	561.1 lbs.
INF-256144	256W x 144H	100.8" x 56.7"	124.8" x 76.7"	628 lbs.
INF-256192	256W x 192H	100.8" x 75.6"	124.8" x 95.6"	764.4 lbs.
INF-320144	320W x 144H	126" x 56.7"	150" x 76.7"	769.2 lbs.
INF-320192	320W x 192H	126" x 75.6"	150" x 95.6"	937.7 lbs.
INF-320240	320W x 240H	126" x 94.5"	150" x 114.5"	1105.5 lbs.
INF-384144	384W x 144H	151.2" x 56.7"	175.2" x 76.7"	912.3 lbs.
INF-384216	384W x 216H	151.2" x 85"	175.2" x 105"	1197.2 lbs.
INF-448144	448W x 144H	176.4" x 56.7"	200.4" x 76.7"	1054.6 lbs.
INF-512144	512W x 144H	201.6" x 56.7"	225.6" x 76.7"	1188.2 lbs.

### Processor Specifications – AVPC Series III

Windows CE, Windows 2000 or Windows XP:

Sound Card (A4):

- Intel Celeron 650MHz
- 10/100BaseT Ethernet
- 4 x RS232 Ports
- 2 x USB
- 20GB rugged laptop hard drive
- TuneBlaster compatible audio output
- AVPC Windows display driver directly drives the LED display

- 4 channels with 2 speaker connections per channel
- 20W amplification built-in for each speaker
- Independent volume control for each speaker
- 256 canned tunes stored on the sound card
- Each channel can play a different tune simultaneously
- Sound source can be software switched from Tunes to the processor
- TuneBlaster output

# Visual Workplace Solutions

Full Matrix Andon AlphaVision PC



"If you can't see your data, does it really exist?"

### Keeping Score

ENTECH LED Andon boards and marquee displays are your performance scoreboards. Selecting what information you need displayed is critical to any effective productivity improvement program.

ENTECH's Visual Workplace solutions are designed to automatically and instantaneously display key performance indicators to the people that need them the most, your workforce.

Others have and you can too. As time goes on and your processes improve, you'll find that your teams will need new metrics and different data to take their next steps. ENTECH's flexible, real-time displays make it simple.



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**Grand Prairie, TX 75050**  
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**972-606-0072 fax**  
**www.alpha-led.com**  
**www.ledticker.com**

# AlphaVision PC Customized Factory Solutions



The AlphaVision PC (AVPC) series is a unique family of full matrix LED Andon displays that incorporate embedded PC technology. This eliminates the need for special software or proprietary protocols and greatly increases display capabilities while minimizing integration costs.

The AVPC family provides a new level of performance and flexibility for companies of all sizes involved in diverse manufacturing applications... from General Motors and Miller Brewing to smaller molders, fabricators and assembly operations.

**Bright and efficient displays**  
AVPC utilizes industry standard tricolor .39" or new full-color .39" pixel pitch offering outstanding brightness, contrast and viewing angles. Long-life (100,000 hours) LED technology also minimizes energy consumption.

**Simplified networking**  
On-board Ethernet provides TCP/IP connectivity, the most commonly deployed physical network topology

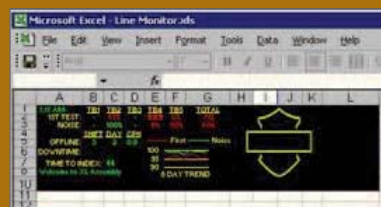
**Modular design**  
Modular component construction simplifies trouble-shooting and repair. For instance, power supplies are redundant and hot swappable (AlphaVision Infinity only).

**Open architecture**  
AVPCs are available with Windows CE, Windows 2000 or Windows XP operating systems installed. This allows for OPC, ODBC and DDE data transfer compatibility via hundreds of commercially available software packages including Vision Manager.

**Flexible alarm and annunciation**  
AVPCs can augment visual alarms with triggered sounds from optional 16-bit TuneBlaster/pro interface from a library of over 255 preprogrammed tunes.



Just outside Milwaukee, Harley-Davidson uses this double-sided 8.5 ft x 3 ft AlphaVision PC full-matrix Andon display to keep their powertrain operations on track. The Excel spreadsheet (see right) driven, real-time dynamics show current efficiency levels in different colors so line workers can immediately adjust if they're falling behind or there's a stop in the line.



## AlphaVision PC Tri-Color Full Matrix Andons – Series III

ENTECH's AlphaVision PC Series III is the latest generation of the most successful full matrix LED display ever developed expressly for manufacturing.

In the last 5 years, over 1000 AVPCs have been deployed in industries ranging from automotive manufacturing to bottling, aerospace and others. First to offer the industry .39" pitch display resolution and PC connectivity, AlphaVision greatly simplified data integration to display and provided the performance necessary to meet diverse applications.

Series III continues this proud tradition of helping businesses worldwide be their most productive, by offering improvements in operating efficiency and performance.

**Less Power**  
Series III incorporates efficient driver board technology reducing overall power consumption up to 46%.

**24/7 Operation**  
Redundant power supplies and new heads up diagnostic display provides floor level diagnostics.

**Simplified**  
Series III construction utilizes surface mount LED technology reducing components and wiring.

**Front service**  
Display driver boards, redundant power supplies, controller... all front accessed and serviceable.

**Flexibility**  
Pentium-class processor. Available with either a 2 1/2" hard or flash drive. Windows CE, Windows 2000 or Windows XP

**Popular sizes**  
Scalable solution with sizes ranging from 10' wide X 5' tall to 5' wide to 1' tall. Configured single or double sided.

### Andon Models

- .39" Pitch
- Tricolor LED with 8 shades
- 100,000 calculated MTBF (11+years)
- NEMA 12 enclosure
- 5° downward tilt to reduce glare
- Interior service light
- Designed for double-sided applications
- Top hinged front access door with pneumatic struts
- Hinged interior display assembly with pneumatic struts
- Non-glare polycarbonate lens



"ENTECH's AVPC LED Andon product line represents the state-of-the-art in automotive Andon display board technology for viewability, connectivity and flexibility."

-Richard Dahlstrom  
Corporate Vice President  
McNaughton-McKay Electric Company

### AlphaVision PC Display Capacity

Number of 4" and 2.1" characters per line

Pixel Array	4" char./line	2.1" char./line
192W x 48H	21/3	32/6
192W x 64H	21/4	32/8
192W x 80H	21/5	32/10
192W x 96H	21/6	32/12
256W x 32H	28/2	42/4
256W x 48H	28/3	42/6
256W x 64H	28/4	42/8
256W x 96H	28/6	42/12
256W x 112H	28/7	42/14
320W x 32H	35/2	53/4
320W x 64H	35/4	53/8
320W x 96H	35/6	53/12
320W x 112H	35/7	53/14
320W x 128H	35/8	53/16

## AlphaVision Infinity Color Full Matrix Andon

The Infinity is the newest member of the AlphaVision product line, incorporating ENTECH's unique RGB SMT Prism pixel, to provide a cost effective, .39" pitch, full color display.

Infinity is ideal for those applications requiring additional colors to distinguish KPI and quality data. In addition, Infinity supports real-time video, providing a full function multi-media platform for unlimited factory floor communication... training/safety videos, management broadcasts and general employee communications.

Infinity offers these unique capabilities:

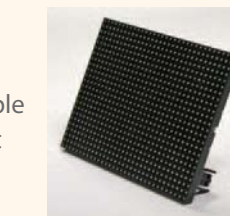
**High Performance**  
16.8 million colors, 60 fps video, 240 Hz refresh rate, all digital DVI interface

**Controller**  
Optional PCbrick controller or your company specified model.

**Modular display construction**  
12" X 12" color LED tiles offer exceptional brightness, contrast and off-angle viewing.

**Optional NEMA enclosure**  
NEMA 12 enclosure available in 256 x 120 configuration only.

**Front service**  
Display tiles, redundant/hot swappable power supplies, controller... all front accessed and serviceable.



12" X 12" module

### Infinity Full Color Models

- .394" pitch
- 16.7 million colors
- Optional NEMA 12 enclosure
- DVI Interface (DVI specifications)
- Front-serviceable and hot-swappable LED display tiles and power supplies
- 100-240 VAC, 50/60 Hz



"With the introduction of the AlphaVision PC, we moved from an internal backlight incandescent system to a state-of-the-art LED solution to display "cause" codes associated with production delaying events. When we saw an ENTECH LED display in use at our F22 operation, it looked exactly like what we needed for our 777 line."

-Brian Bellevue  
Manager of 777 Moonshine Operations  
Boeing Corporation

### AlphaVision Infinity Display Matrix

	Height				
	120	144	192	216	240
256	X*	16:9**	4:3**		
320		X	X		4:3**
384		X		16:9**	
448		X			
512		X			

\*NEMA enclosure only  
\*\*Aspect ratio